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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/341,085	07/02/1999	CAREL J.L. VAN DRIEL	PHN17.110	4715

7590 09/29/2003  
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EXAMINER

NGUYEN, THU HA T

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 09/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/341,085

Applicant(s)

VAN DRIEL, CAREL J.L.

Examin r

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears n the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disp sition of Claims**

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1, 3-7 are presented for examination.
2. Claims 2 and 8 are cancelled without prejudice.

### Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 7 lack of positive antecedent basic. In claim 1, Applicant recites the limitation "...the sub-network corresponding to...." There is insufficient antecedent basic for this limitation in the claim. In claims 1 and 7, Applicant recites the limitation "...the network switch...the network control node...." There is insufficient antecedent basic for this limitation in the claims. Further in claim 7, Applicant recites the limitation "...the network control node router...the access node router...."lack of positive antecedent basic for this limitation in the claim. For purpose of examination, Examiner suggests Applicant should change to "...the non-dedicated network switch...the network control switch..." or "...the network control element(s)..." and further in claim 7, Examiner suggests Applicant should change to "...the network control switch...the access node switch...."

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hiekali** U.S. Patent No. **5,619,500**, in view of **Bronstein et al.**, (hereinafter **Bronstein**) U.S. Patent No. **5,910,954**.

7. As to claim 1, **Hiekali** teaches the invention as claimed, including communication system comprising:

a plurality of terminals (figures 2, 4, element 205) which are connected to an access network (figure 2-3, col. 3 lines 3-25), the access network having,

an access node connected to a transmission network and a non-dedicated network switch, the network control elements include a network control switch and a plurality of channel cluster modules, the channel cluster modules are arranged for transmitting downstream signals on one carrier frequency and are coupled to the sub-network corresponding to the network control node (figures 3-5, 8-10, abstract, col. 2 lines 5-33, col. 3 lines 3-59, col. 14 lines 20-60).

However, **Hiekali** does not explicitly teach wherein the access node includes an access node switch couple to the network switch and a plurality of network control elements, the access node switch controls all of the network specific switching and the transmission network comprises a plurality of sub-networks coupled to the network control elements. **Bronstein** teaches wherein the access node includes an access node switch couple to the network switch and a plurality of network control elements, the access node switch controls all of the network specific switching (figures 1, 4-5, abstract, col. 2 lines 50-col. 4 lines 30), and wherein, the transmission network comprises a plurality of sub-networks coupled to the network control elements (figures 1, 4-5). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Hiekali and Bronstein** to have the access node includes an access node switch couple to the network switch and a plurality of network control elements, the access node switch controls all of the network specific switching and the transmission network comprises a plurality of sub-networks coupled to the network control elements because it would have an efficient data communications network that has plurality of network switches that can control, manage and reconfigure the multiplexing of sub-network systems.

8. As to claim 3, **Hiekali** teaches the invention as claimed, wherein the channel cluster modules comprise at least one downstream channel module (figure 5, col. 3 lines 60-col. 5 lines 45, col. 6 lines 8-col. 7 lines 15).

9. As to claim 4, **Hiekali** teaches the invention as claimed, characterized in that the channel cluster module comprises an upstream channel module (figures 5-6, col. 3 lines 60-col. 5 lines 45, col. 6 lines 8-col. 7 lines 15).

10. As to claim 5, **Hiekali** teaches the invention as claimed, wherein the terminals comprises signaling means for exchanging network layer control information with the network switch (figure 4, abstract, col. 2 lines 5-33).

11. As to claim 6, **Hiekali** teaches the invention as claimed, wherein the network switch comprises proxy signaling means for deriving network layer control information from session layer and/or transport layer information exchanged between a terminal and the network switch (figure 4, abstract, col. 3 lines 60-col. 5 lines 45).

12. As to claim 7, **Hiekali** teaches the invention as claimed, including access node connectable to a transmission network, and to a non-dedicated network switch, the access node comprising:

an access node switch coupled to a plurality of network control elements, wherein the access node switch is connectable to the network switch and wherein the network control elements comprise a network control switch and a plurality of channel cluster modules, in that the network control node router is coupled to the access node router and to the channel cluster modules, and in that the channel cluster modules are

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connectable to a sub-network corresponding to the network control node (figures 2-4, abstract, col. 1 lines 32-col. 2 lines 33, col. 3 lines 3-59).

However, **Hiekali** does not explicitly teach the access node switch controls all of the network specific switching and the transmission network comprises a plurality of sub-networks coupled to the network control elements. **Bronstein** teaches the access node switch controls all of the network specific switching (figures 1, 4-5, abstract, col. 2 lines 50-col. 4 lines 30), and wherein, the transmission network comprises a plurality of sub-networks coupled to the network control elements (figures 1, 4-5). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of **Hiekali and Bronstein** to have the access node switch controls all of the network specific switching and the transmission network comprises a plurality of sub-networks coupled to the network control elements because it would have an efficient data communications network that has plurality of network switches that can control, manage and reconfigure the multiplexing of sub-network systems.

### Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SPE Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax number for art unit 2155 is (703) 746-7239.

Thu Ha Nguyen

September 16, 2003



**HOSAIN ALAM**  
**SUPERVISOR / PATENT EXAMINER**